UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,865	12/14/2005	Shojiro Shibata	450100-05110	3686

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>17 November 2009</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3-6,8-10 and 12-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,3-6,8-10 and 12-16</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

1.   This office action is in response to the RCE filed on 11/17/09.

2.   **Response to Applicant's Arguments**

In an updated search, examiner found Takishima (US pat no 6,856,650) which suggests

determining whether the image data is an I-type and whether a coding phase of a past

macro block agrees with that of a coding phase of a current macro block (see column 6,

lines 11-19). The reason for performing this limitation is because to calculate SNR

needed to encode the next frame (see column 2, lines 33-37).

The combination of Kitamura (EP 1 069 779 A1) in view of Takishima (US pat no

6,856,650) disclose the claimed invention of claim 1 and other independent claims.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1, 3, 5, 6, 8-10, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Kitamura (EP 1 069 779 A1) in view of Takishima (US pat no

6,856,650).

With regards to claim 1, Kitamura discloses an image processing apparatus for

subjecting image data of a base band or image data, which is coded up to a midstep, to

coding processing up to a midstep or to perfect coding processing, comprising:

acquisition means for acquiring information as to coding executed to the image

data in the past (see paragraph 12, extracts past encoding parameters and figure 14,

105); and

control means for controlling the coding processing up to a midstep or the perfect

coding processing of the image data of the base band or the image data coded up to

the midstep (paragraph 15, re-encoding and figure 14, 106), wherein, when a coding

picture type is a predetermined picture type (figure 32, picture type determination

process), the control means determines whether or not the information as to coding is to

be used to the coding processing based on the information as to the coding acquired by

the acquisition means and on a condition as to the coding processing executed to the

image data by the image processing apparatus (figure 14, 105, 106, 107 steps to coding

a vide signal).

Kitamura does not disclose acquired previously-executed image coding information is

used is determined based on at least whether the image data is an I-type and whether a

phase of a past macro block agrees with that of a phase of a current macro block.

Takishima suggests determining whether the image data is an I-type and whether a

coding phase of a past macro block agrees with that of a coding phase of a current

macro block (see column 6, lines 11-19). The reason for performing this limitation is

because to calculate SNR needed to encode the next frame (see column 2, lines 33-

37).

One skilled in the art would include such feature because to ensure each frame in the

video is align to ensure successful compression.

With regards to claim 3, Kitamura discloses determines whether or not the information

as to coding is to be used based on whether or not the amount of generated code in the

decoding described in the information as to coding is equal to or less than a

predetermined value (see paragraph 336, the limit is the predetermined value).

With regards to claims 5 and 6, see the rationale for claim 1. In addition, see paragraph

127, the encoder is a computer and a computer contains at least one processor

requiring instructions.

With regards to claim 8, see the rationale for claim 1. In addition, Kitamura discloses

decoding means for decoding the image data, which is supplied thereto, perfectly or

imperfectly (figure 14, 102, 103 and 104 is the decoder section, and see paragraph 15);

and coding means for subjecting the image data of a baseband, which is perfectly

decoded by the decoding means, or the image data, which is created by being

imperfectly decoded by the decoding means and coded up to a midstep, to coding

processing up to a midstep or to perfect coding processing (see figure 14, the video

signal is a baseband signal); and the control means determines, when a coding picture

type is a predetermined picture type, whether or not the information as to coding is to be

used to the coding processing based on the information as to the coding acquired by

the acquisition means and on a condition as to the coding processing (see figure 32,

determines past coding parameters).

With regards to claims 9 and 10 see the rationale for claims 1 and 8. In addition, see

paragraph 127, the encoder is a computer and a computer contains at least one

processor requiring instructions.

With regards to claim 12, see the rationale for claims 1 and 8. In addition, Kitamura

discloses recording control means for controlling the record of the image data coded by

the coding means (see paragraph 13, the encoding device superimpose information

indicating the selected past encoding parameters, these parameters are recorded onto

history_stream()).

With regards to claim 14, see the rationale for claims 1, 8 and 12. In addition, Kitamura

discloses a coding step for subjecting the image data of a baseband, which is perfectly

decoded by processing of the decoding step, or the image data, which is created by

being imperfectly decoded by processing of the decoding step and coded up to a

midstep, to coding processing up to a midstep or to perfect coding processing (see

figure 14, signal is first decoded, 102 and then reencoded at 105).

With regards to claims 15 and 16, see the rationale for claims 1 and 8. In addition,

Kitamura discloses reproduction means for reproducing the image data recorded to a

predetermined recording medium (paragraph 483, video is retrieved from a magnetic

drive).

3.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura

'779 in view of Takishima '650 as applied to claim 1 further in view of Yim (US pat no

6,445,828).

With regards to claim 4, Kitamura discloses all the limitations of claim 1; Kitamura

discloses matching current bit sequence with past bit sequences and a macro-block

assignment in user data which contain macro-block phase information (see paragraphs

262 and 287), but does not disclose the phase of a macro block in the past coding

described in the information as to coding agrees with the phase of the macro block of

the coding processing. Yim discloses the macro block in the past coding described in

the information as to coding agrees with of the macro block of the coding processing

(column 1, lines 48-55). Kitamura also discloses output means which is supplied with

first coding data supplied to another image processing apparatus that decodes the

image data and with second coding data created by the coding processing and outputs

the first coding data (figure 14, 102, 103 and 104 are decoding process); wherein the

amount of the generated code in the decoding described in the information as to coding

is equal to or less than the predetermined value (see figure 14, 5Mbps is the

predetermined value); and the position and the magnitude of an image frame in the past

coding described in the information as to coding agree with those of the coding

processing (paragraphs 262 and 287).

One skilled in the art would include such feature because the reference macro-block is

lined up with the current macro-block to obtain a difference block which is then coded

with DCT, preparing data to compress.

4.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Kitamura '779 in view of Takishima '650 as applied to claim 1 further in view of Shimizu

(US pat no 5,991,452).

With regards to claim 13, Kitamura discloses all the limitations of claim 12, but does not

disclose coding image data at different positions. Shimizu discloses coding image data

at different positions (see figure 4, ST1-3). One skilled in the art would include such

feature because to only limit image processing on areas in the image which are of

interest, to save processing power.

Conclusion

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623

or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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12/27/09

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